



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

SW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,566	11/25/2003	Ulrich Sander	33997.0092	5799
26712	7590	02/23/2005	EXAMINER	
HODGSON RUSS LLP ONE M & T PLAZA SUITE 2000 BUFFALO, NY 14203-2391			AMARI, ALESSANDRO V	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,566

Applicant(s)

SANDER, ULRICH

Examiner

Alessandro V. Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 10 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/1/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to because of the following informalities:

Regarding claim 14, the phrase, "the objective is arranged decentrically with respect to the axis" is ambiguous since the axis refers to the objective's own optical axis and it is unclear how the objective's axis can be arranged decentrically to itself.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 11, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al US 4,448,498.

In regard to claim 1, Muller et al teaches (see Figures 1, 2) a stereomicroscope comprising an objective (10) having an optical axis (III); a zoom system (17) downstream of the objective, the zoom system having a plurality of axes as shown in Figures 1 and 2 wherein at least one of the plurality of axes of the zoom system forms an angle with the optical axis of the objective as shown in Figure 2; another axis (associated with eyepiece 2) extending substantially parallel to the at least one axis of the zoom system as shown in Figure 2, a plurality of deflector elements (13, 16, 20) by means of which at least one observation beam emerging from the objective can be

guided into the zoom system and at least one observation beam emerging from the zoom system can be guided on to the other axis; and at least one optical element (21, 23) on the plurality of axes of the zoom system and/or on the other axis for extending the beam path of the at least one observation beam in a direction substantially parallel to the at least one axis of the zoom system and/ or to the at least one axis parallel thereto.

Regarding claim 11, Muller et al teaches that the zoom system comprises at least three magnification/observation channels as shown in Figures 1 and 2.

Regarding claim 12, Muller et al teaches that the zoom system comprises four magnification/observation channels as shown in Figures 1 and 2.

Regarding claim 14, Muller et al teaches that the objective is arranged decentrically with respect to the axis as shown in Figures 2 and 3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Matsubara US 4,643,541.

Regarding claim 2, Muller et al teaches the invention as set forth above but does not teach at least one optical element for extending the beam path produces intermediate images of an object which is to be observed.

Regarding claim 2, Matsubara teaches (see Fig. 2) at least one optical element (2, 3, 4, 5) for extending the beam path produces intermediate images (O) of an object which is to be observed as described in column 3, lines 12-39.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the optical elements producing intermediate images as taught by Matsubara in the stereomicroscope of Muller et al in order to improve operability and the distance between the position of the eye point and focusing handle can be made properly short as described in column 1, lines 24-29 of Matsubara et al.

6. Claims 3, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Takahama et al US 5,861,982.

Regarding claims 3, 7, 8 and 9, Muller et al teaches the invention as set forth above but does not teach in regard to claim 3, comprising at least one opto-mechanical component provided on at least one axis of the zoom system and/or the other axis or regarding claim 7, wherein at least one opto-mechanical component includes a beam splitter or regarding claim 8, wherein the at least one opto-mechanical component can be selectively pivoted in and out of the axis on which the at least one opto-mechanical component is provided or regarding claim 9, wherein the at least one opto-mechanical component can be opto-mechanically removed from the axis on which the at least one opto-mechanical component is provided.

Regarding claims 3, 8 and 9, Takahama et al teaches (see Fig. 8) at least one opto-mechanical component provided on at least one axis of the zoom system and/or the other axis which can be selectively pivoted in and out of the axis or opto-

mechanically removed from the axis as described in column 10, lines 44-67 and column 11, lines 1-13. Regarding claim 7, Takahama et al teaches the at least one opto-mechanical component includes a beam splitter as described in column 10, lines 49-53.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the opto-mechanical components as taught by Takahama et al in the stereomicroscope of Fuller et al in order to accurately insert/remove optical components into/from corresponding switching positions without a complicated adjustment as described in column 6, lines 13-18 of Takahama et al.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Shioda et al US 6,081,371.

Regarding claim 16, Muller et al teaches the invention as set forth above but regarding claim 16, does not teach a data projecting device.

Regarding claim 16, Shioda et al does teach (see Figures 18, 19) a data projector (126, 127, 129, 130, 131, 132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the data projector of Shioda et al in the stereomicroscope of Muller et al in order to observe other data about the specimen in the same visual field as the observed image of the specimen.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Takahama et al US 5,861,982 and further in view of Shioda et al US 6,081,371.

Regarding claim 4, Muller et al in view of Takahama et al teaches the invention as set forth above but does not teach a data projecting device.

Regarding claim 4, Shioda et al does teach (see Figures 18, 19) a data projector (126, 127, 129, 130, 131, 132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the data projector of Shioda et al in the stereomicroscope of Muller et al in view of Takahama et al in order to observe other data about the specimen in the same visual field as the observed image of the specimen.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Takahama et al US 5,861,982 and further in view of Straehle et al US 20030165012.

Regarding claim 5, Muller et al in view of Takahama et al teaches the invention as set forth above but does not teach an inverter device.

Regarding claim 5, Straehle et al does teach (see Figure 7) an inverter device (750) as described in page 6, paragraph 0063.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the inverter as taught by Straehle et al in the stereomicroscope of Muller et al in view of Takahama et al in order to provide reversion of the optical image for ease of viewing of the object.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498 in view of Takahama et al US 5,861,982 and further in view of Simon et al US 6,356,088.

Regarding claim 6, Muller et al in view of Takahama et al teaches the invention as set forth above but does not teach a laser shutter device.

Regarding claim 6, Simon et al teaches a laser shutter device as described in column 2, lines 15-33.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a laser shutter as taught by Simon et al in the stereomicroscope of Muller et al in view of Takahama et al in order to ensure laser safety in the device.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al US 4,448,498.

Regarding claim 15, Muller et al teaches the invention as set forth above but does not teach a beam splitter being mounted between the objective and the zoom system. It is well known in the microscope art to utilize beam splitters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a beam splitter in the stereomicroscope of Muller et al to provide an additional optical channel split from between the objective and zoom system for image recording.

Allowable Subject Matter

12. Claims 10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 10 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "at least one observation beam travels in a direction along the other axis that is opposite to a direction the at least one observation beam travels through the zoom system" as set forth in the claimed combination.

Claim 13 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "the axis of the objective extends substantially vertically and the at least one axis of the zoom system extends substantially horizontally" as set forth in the claimed combination.

The prior art of record, Muller et al teaches a stereomicroscope comprising an objective having an optical axis; a zoom system downstream of the objective, the zoom system having a plurality of axes wherein at least one of the plurality of axes of the zoom system forms an angle with the optical axis of the objective; another axis extending substantially parallel to the at least one axis of the zoom system, a plurality of deflector elements by means of which at least one observation beam emerging from the objective can be guided into the zoom system and at least one observation beam emerging from the zoom system can be guided on to the other axis; and at least one optical element on the plurality of axes of the zoom system and/or on the other axis for extending the beam path of the at least one observation beam in a direction

substantially parallel to the at least one axis of the zoom system and/ or to the at least one axis parallel thereto. However, the prior art of record does not teach that at least one observation beam travels in a direction along the other axis that is opposite to a direction the at least one observation beam travels through the zoom system or the axis of the objective extends substantially vertically and the at least one axis of the zoom system extends substantially horizontally and there is no teaching or motivation to modify this difference as derived.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/721,566
Art Unit: 2872

Page 10

ava *ava*
14 February 2005


MARK A. ROBINSON
PRIMARY EXAMINER